ABSTRACT OF THE DISCLOSURE

A magneto-resistance effect ("MR") type composite head includes a reproduction head with an MR element arranged between a first and a second magnetic shield; and a recording head arranged adjacent to the reproduction head so as to use the second magnetic shield as a first magnetic pole film and having a second magnetic pole film opposing to the first magnetic pole via a magnetic gap; the MR element includes a center region including a ferromagnetic tunnel junction magneto-resistance effect film having a first ferromagnetic layer and a second ferromagnetic layer for generating a magneto-resistance effect using the first and the second magnetic shields as electrodes so that a current flows in an almost vertical direction between the first and the second magnetic shields; a tunnel barrier layer provided between the first and the second ferromagnetic layer; and an end region arranged to sandwich the center region from both sides for /applying a bias magnetic field to the center region.